

A catalogue of recent Cnidaria type specimens in the Western Australian Museum of Natural Science, Perth

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Abstract – This is the first published catalogue of cnidarian type material lodged in the Western Australian Museum of Natural Science. Fifty cnidarian species of the classes Hydrozoa and Anthozoa are represented in the type collection. The earliest cnidarian species described in this collection date from 1910 when alcyonacean material from the Hamburg South-Western Australian Research Expedition was published. Information is presented here on the registration and collection details of the specimens, and habitat information is given where available.

INTRODUCTION

The cnidarian collection held in the Department of Aquatic Zoology, Museum of Natural Science, Western Australian Museum (WAM), Perth, consists of over 13,300 registered specimen lots. This material includes type specimens of 50 species of Recent Cnidaria. Hydrozoan type material consists of two species of Stylasteridae. Anthozoan type material consists of 10 species of Alcyonacea, one species of Pennatulacea, six species of Actiniaria, four species of Zoanthidea and 27 species of Scleractinia. This is the first time that a catalogue of the WAM cnidarian type material has been published.

The earliest references to species represented in the WAM cnidarian type collection date from 1910 when species of Alcyonacea (Kükenthal, 1910) and Actiniaria (Lager, 1911), collected on the Hamburg South-Western Australian Research Expedition, were described. This expedition, led by W. Michaelsen and R. Hartmeyer, was undertaken in 1905 and material was collected from a number of Western Australian localities. Since then, significant contributions to the type collection have been made by Alderslade (1983, 1998), Alderslade and Baxter (1987), Cairns (1988, 1998), Carlgren (1954) and Veron (1985).

In this paper, the taxonomic sequence of the classes and orders follow Cairns *et al.* (1991). Families, genera and species are arranged alphabetically within each higher classification. Where the original generic assignment of a species has been revised or where the species has been synonymised, the new generic assignment is given as a heading. The original genus-species combination is provided in full beneath it. The species is placed in the family of the genus to which

it now belongs. The author who revised the generic assignment of the species is noted in 'Remarks'. The spelling of genera and species has been changed, where necessary, from the original spelling to conform with ICZN rules (ICZN 1985 Article 32 c, d). Many of the earlier taxonomists referred to here did not designate a holotype but instead described type material that may have consisted of a single specimen or a series. In those cases where there was either a series of specimens, or where the number of specimens being described was unclear, the type material is designated as syntypic (ICZN 1985 Article 73 b).

In the majority of cases, two WAM registration numbers are given. The first, with the prefix WAM is the original registration number and the second, provided in square brackets with the prefix WAM Z, is the new registration number linked to the WAM computer database. Part of the old registration numbers included the last two digits of the year in which the specimens were registered. This is unsatisfactory because at some time in the future numbers would start to be replicated. A sequential numbering system has now been adopted. The prefix Z distinguishes the registration numbers of the section of Marine Invertebrate Zoology from those of other sections within the WAM. Where a specimen was not registered previously, the registration number has the WAM Z prefix but is not quoted inside square brackets. The number of specimens, the sex if known, and the method of storage, are given in parentheses after the registration number. Specimens that are described as 'wet' are stored in 70 % (v/v) ethanol. When latitudes and longitudes have not been quoted in the reference or on the specimen label, they are supplied in square brackets. Distances and

depths are cited when provided, and their metric conversion appears in square brackets. Any inconsistencies between the label, registration catalogue or published information are noted under 'Remarks'. Additional information considered useful to researchers, such as the condition of the specimens, is also presented under 'Remarks'.

Abbreviations used in this paper are as follows: ICZN, International Commission on Zoological Nomenclature; MTQ, Museum of Tropical Queensland, Townsville; USNM, United States National Museum (now the National Museum of Natural History); WAM, Western Australian Museum (now the Museum of Natural Science, Western Australian Museum), Perth.

Class HYDROZOA Owen, 1843

Order ATHECATAE Hincks, 1868

Family Stylasteridae Gray, 1847

Genus *Stylaster* Gray, 1831

Stylaster marshae Cairns, 1988

Stylaster marshae Cairns, 1988: 108–112, figures 1 a, c, 2 a–g.

Material Examined

Holotype number WAM 535–87 (♀; dry) [new registration number: WAM Z 925].

Paratypes number WAM 424–86 (3♀; dry) [new registration number: WAM Z 926].

Locality: Station 3 (26°07'40"S, 113°10'20"E), NW of Surf Point, Dirk Hartog Island, Shark Bay, Western Australia, under a ledge at 30 feet [9 m] depth, 5 April 1979, L.M. Marsh.

Paratypes number WAM 129–58 (2♀, 2♂; dry) [new registration number: WAM Z 927].

Locality: Cape Vlaming [32°02'S, 115°27'E] and Salmon Point [32°02'S, 115°31'E] at Rottneest Island, Western Australia, in caves and on broken reef surface, December 1950, L.M. Marsh.

Paratypes number WAM 80–78 (6♀; dry) [new registration number: WAM Z 928].

Locality: Goss Passage, SE end of Long Island, Wallabi Group, Houtman Abrolhos Islands, Western Australia, in a sheltered position on a coral pinnacle at 25–42 feet [7.5–13 m] depth, 4 September 1977, S.M. Slack-Smith.

Paratypes number WAM 425–86 (2♀; dry) [new registration number: WAM Z 929].

Locality: Station 4 (26°07'40"S, 113°10'20"E), E side of reef, S of Surf Point, Dirk Hartog Island, Shark Bay, Western Australia, under ledges at 1–2 m depth, 5 April 1979, L.M. Marsh.

Paratypes number WAM 426–86 (4♀, 3♂; dry) [new registration number: WAM Z 930].

Locality: Rottneest Island [32°00'S, 115°31'E], Western Australia, donated to WAM in November 1974, E.P. Hodgkin.

Paratypes number WAM 429–86 (2♂; dry) [new registration number: WAM Z 931].

Locality: SE side of Pelsaert Island, Pelsaert Group [28°50'S, 113°55'E], Houtman Abrolhos Islands, Western Australia, on an intertidal reef platform, 13–14 December 1982, S.M. Slack-Smith.

Paratypes number WAM 130–73 (3♂; dry) [new registration number: WAM Z 932].

Locality: Green Island Reef, Rottneest Island [32°00'S, 115°31'E], Western Australia, abundant on wall of reef hole exposed to surge, 22 January 1973, L.M. Marsh and R.W. George.

Paratype number WAM 430–86 (1♀; dry) [new registration number: WAM Z 933].

Locality: SW of Gun Island, Pelsaert Group [28°50'S, 113°55'E], Houtman Abrolhos Islands, Western Australia, inside outer reef, among dead staghorn *Acropora*, 8 April 1976, L.M. Marsh *et al.*

Paratypes number WAM 427–86 (1♀, 2♂; dry) [new registration number: WAM Z 934].

Locality: Carnac Island [32°07'S, 115°39'E], off Fremantle, Western Australia, 9 January 1978, C. Bryce and L.M. Marsh.

Paratypes number WAM 440–86 (3♀, 3♂; dry) [new registration number: WAM Z 935].

Locality: Little Island [31°49'S, 115°43'E], off Whitford Beach, Western Australia, on roof of cave at 1–2 m depth, 13 April 1974, L.M. Marsh.

Paratypes number WAM 431–86 (2♀, 3♂; dry) [new registration number: WAM Z 936].

Locality: Inside outer reef NW of Gun Island, Pelsaert Group [28°50'S, 113°55'E], Houtman Abrolhos Islands, Western Australia, among dead staghorn *Acropora* at 0–1 m depth, 1 April 1976, L.M. Marsh *et al.*

Remarks

The specimen of WAM 129–58 was pale pink in colour when alive.

Colonies of WAM 535–87 and WAM 80–78 are broken into many pieces and fragments are broken off colonies of WAM 426–86.

One ♀ colony from WAM 80–78 was donated to USNM (USNM 79519) and one ♂ colony from WAM 440–86 was donated to USNM (USNM 79520).

Cairns (1988) states that there is one female in WAM 429–86, but there are two specimens present and the specimen label cites two males. Also, for WAM 130–73 Cairns (1988) states the

sex as being female but the specimen label cites it as male.

Stylaster tenisonwoodsi Cairns, 1988

Stylaster tenisonwoodsi Cairns, 1988: 112–115, figures 1b, 3a–f.

Material Examined

Holotype number WAM 536–87 (♀; dry) [new registration number: WAM Z 923].

Paratypes number WAM 934–86 (3♀; dry) [new registration number: WAM Z 924].

Locality: Station 10, SE corner of Ashmore Reef [12°17'S, 123°02'E], Western Australia, at 6–8 m depth on an outer reef slope on the under side of *Porites* ledges, 15 September 1986, L.M. Marsh.

Remarks

One ♀ of WAM 934–86 was donated to USNM (USNM 79521).

Class ANTHOZOA Ehrenberg, 1833

ORDER ALCYONACEA Lamouroux, 1816
(emend. Verrill, 1866)

Family Alcyoniidae Lamouroux, 1812 (emend. May, 1899)

Genus *Dampia* Alderslade, 1983

Dampia pocilloporaeformis Alderslade, 1983

Dampia pocilloporaeformis Alderslade, 1983: 34–35, figures 1, 2, 4, 5.

Material Examined

Holotype number WAM 574–79 (wet) [new registration number: WAM Z 868].

Locality: Dampier Archipelago [20°33'S, 116°32'E], Western Australia, collector and date unknown.

Genus *Sinularia* May, 1898

Sinularia platysma Alderslade and Baxter, 1987

Sinularia platysma Alderslade and Baxter, 1987: 204–214, figures 1–8.

Material Examined

Paratypes number WAM 230–86 (1; wet) [new registration number: WAM Z 866]; WAM 231–86 (1; wet) [new registration number: WAM Z 867].

Locality: Thomson Bay (31°59.5'S, 115°33'E), Rottneest Island, Western Australia, at 10 m depth, 17 March 1980, P. Alderslade.

Family Nephtheidae Gray, 1862 (emend. Utinomi, 1954)

Genus *Dendronephthya* Kükenthal, 1905

Dendronephthya michaelseni Kükenthal, 1910

Dendronephthya michaelseni Kükenthal, 1910: 54–55, figures 23–24 and plate 3 figure 17.

Material Examined

Syntypes number WAM 1–62 (2 on sandstone; wet) [new registration number: WAM Z 864].

Locality: NW Australia, collector and date are unknown.

Remarks

Label has "Part of type series?" written on it.

Dendronephthya michaelseni var *laevis* Kükenthal, 1910

Dendronephthya michaelseni var *laevis* Kükenthal, 1910: 55–56, figures 25–26 and plate 3 figure 18.

Material Examined

Syntype number WAM Z 865 (1; wet).

Locality: Barrow Island [20°46'S, 115°24'E], Western Australia, collector and date unknown.

Remarks

Small piece of a colony.

Genus *Nephthea* Audouin, 1826

Nephthea complanata Kükenthal, 1910

Nephthea complanata Kükenthal, 1910: 44–46, figures 7–8 and plate 2 figure 13.

Material Examined

Syntypes number WAM 7075 (2; wet) [new registration number: WAM Z 862].

Locality: Station 15 u. 19, Sharks Bay, nordnordöstl. von der Nordspitze von Heirisson Proug, 11–11.5 m; 18.VI.05 und Useless Inlet, 7 m; 13.IX.05. (Station 15 and 19, Shark Bay, NNE from the northern point of Heirisson Prong [26°03'S, 113°23'E]...and Useless Inlet [26°08'S, 113°21'E]... [Western Australia]), 1905, W. Michaelsen and R. Hartmeyer (Hamburg SW Australian Expedition).

Remarks

The location is given only as "Shark Bay" on the specimen label. It is unclear on which date the specimens were collected. In alcohol, they are olive-green in colour and the points are composed of pink sclerites.

Nephthea hartmeyeri Kükenthal, 1910

Nephthea hartmeyeri Kükenthal, 1910: 46–47, figures 9–10 and plate 3 figure 19.

Material Examined

Syntype number WAM 7178 (1; wet) [new registration number: WAM Z 863].

Locality: Station 19, Useless Inlet [26°08'S, 113°21'E], Shark Bay, Western Australia, at 7 m depth, 13 September 1905, W. Michaelsen and R. Hartmeyer (Hamburg SW Australian Expedition).

Remarks

It is part of the type series and is a very small fragment of a colony.

Family Isididae Lamouroux, 1812

Subfamily Circinisidinae Grant, 1976

Genus *Annis* Alderslade, 1998*Annis sprightly* Alderslade, 1998

Annis sprightly Alderslade, 1998: 324–329, figures 244–247, 305.

Material Examined

Holotype number WAM 385–79 (wet) [new registration number: WAM Z 869].

Locality: Station 33M (29°06.7'S, 113°58.5'E to 29°07.5'S, 114°0'E), approximately 92 km west of Dongara, Western Australia, dredged at 91.4 m depth, 19 February 1976, M.V. *Sprightly* Dredging Cruise.

Genus *Zignis* Alderslade, 1998*Zignis lornae* Alderslade, 1998

Zignis lornae Alderslade, 1998: 312–318, figures 234–238, 301.

Material Examined

Holotype number WAM 26–74 (wet) [new registration number: WAM Z 871].

Paratype number WAM 23–74 (1; wet) [new registration number: WAM Z 872].

Locality: NW of Rottnest Island [32°00'S, 115°30'E], Western Australia, dredged from amongst sponges at 37 fathoms [67.7 m], 12 August 1962, B.R. Wilson on F.V. *Bluefin*.

Paratype number WAM 395–79 (1; wet) [new registration number: WAM Z 873].

Locality: NW of Rottnest Island [32°00'S, 115°30'E], Western Australia, dredged from amongst sponges at 37 fathoms [67.7 m], 12 August 1962, R.W. George on F.V. *Bluefin*.

Paratype number WAM 443–80 (1; wet) [new registration number: WAM Z 874].

Locality: West side of Sandy Hook Island [34°02'S, 122°01'E], Recherche Archipelago, Western Australia, on wall of bombie at 80 feet [24.4 m], 8 April 1977, C. Bryce.

Zignis phorinema Alderslade, 1998

Zignis phorinema Alderslade, 1998: 305–312, figures 229–233, 300.

Material Examined

Paratype number WAM 419–80 (1; dry) [new registration number: WAM Z 922].

Locality: Northwest of Rottnest Island [32°00'S, 115°30'E], Western Australia, at 110 ft [33.5 m] depth, December 1979, C. Bryce.

Remarks

The specimen is in several small pieces.

Subfamily Mopseinae Gray, 1870

Genus *Oparinisis* Alderslade, 1998*Oparinisis flexilis* Alderslade, 1998

Oparinisis flexilis Alderslade, 1998: 40–47, figures 12–17, 254.

Material Examined

Paratype number WAM 384–79 (1; wet) [new registration number: WAM Z 870].

Locality: Station 30M (29°07.5'S, 113°57.4'E to 29°08'S, 113°58'E), approximately 92 km west of Dongara, Western Australia, dredged from amongst sponges and stone rubble at 110 m depth, 19 February 1976, M.V. *Sprightly* Dredging Cruise.

Order PENNATULACEA Verrill, 1865

Family Pteroeididae Kölliker, 1880

Genus *Sarcoptilus* Gray, 1848*Sarcoptilus rigidus* Williams, 1995

Sarcoptilus rigidus Williams, 1995: 24–25, figures 7c–d, 8, 9.

Material Examined

Holotype number WAM 363–31 (wet) [new registration number: WAM Z 1142].

Paratype number WAM 364–31 (1; wet) [new registration number: WAM Z 1143].

Locality: Beach at Jarrad Street, Cottesloe [31°59'S,

115°45'E], Perth, Western Australia, 18 May 1931, L. Glauert.

Order ACTINIARIA

Family Actiniidae Rafinesque, 1815

Genus *Bunodactis* Pax, 1920

Bunodactis maculosa Carlgren, 1954

Bunodactis maculosa Carlgren, 1954: 577–578, figures 6–7.

Material Examined

Syntypes number WAM 153–56 (2; wet) [new registration number: WAM Z 888].

Locality: Mangles Bay [32°16'S, 115°43'E], Cape Peron, Western Australia, under stones, 13 September 1952, L.M. Marsh.

Remarks

The locality was given incorrectly as Point Peron in Carlgren (1954). When alive, the column is a light grey-brown in colour with vertical rows of white spots and the tentacles and oral disc are mottled light brown and white. Part of one of the specimens is embedded in wax.

Genus *Isactinia* Carlgren, 1900

Isactinia carlgreni Lager, 1911

Isactinia carlgreni Lager, 1911: 226–228, figures 7–9.

Material Examined

Syntype number WAM 7122 (1; wet) [new registration number: WAM Z 885].

Locality: Station 5, Denham [25°56'S, 113°32'E], Shark Bay, Western Australia, 9 June 1905, W. Michaelsen and R. Hartmeyer (Hamburg SW Australian Expedition).

Remarks

The location is written incorrectly as "Sharks Bay..." in Lager (1911). The collection date is given as 8–9 June 1905 but the specimen label cites 9 June 1905 as the only collection date.

Genus *Oulactis* Milne-Edwards, 1851

Saccactis mcmurricchi Lager, 1911

Saccactis mcmurricchi Lager, 1911: 220–222, figures 1–3.

Material Examined

Syntype number WAM 7123 (1; wet) [new registration number: WAM Z 886].

Locality: Stat. 55, Bunbury Bez., nordnordöstlich von Casuarina Point, Western Australia, Meeresstrand. (Station 55, NNE from Casuarina Point [33°18'S, 115°38'E], near Bunbury, from the sea shore), 24 May 1905, W. Michaelsen and R. Hartmeyer (Hamburg SW Australian Expedition).

Remarks

The date is given incorrectly as 24 July 1905 in Lager, 1911. Carlgren (1950) considered it likely that *Saccactis* Lager, 1911 was a synonym of *Oulactis* Milne-Edwards, 1851.

Genus *Stylobates* Dall, 1903

Stylobates loisetteae Fautin, 1987

Stylobates loisetteae Fautin, 1987: 2–6, figures 1–6.

Material Examined

Holotype number WAM 18–84 (f; wet) [new registration number: WAM Z 875], figures 3–4.

Locality: Station SO2/82/46 (18°41'S, 116°45–47'E), 145 nautical miles [269 km] NW of Port Hedland, Western Australia, engel trawl at 506–508 m depth on muddy substrate, bottom temperature 8.5°C, 13 April 1982, L.M. Marsh on R.V. *Soela*.

Paratypes number WAM 21–84 (2; wet) [new registration number: WAM Z 876], figures 1, 3.

Locality: Station COR/83/04 (18°06'S, 118°10'E), SW of Imperieuse Reef, Rowley Shoals, Western Australia, beam trawl on mud substrate at 353–356 m depth, 17 August 1983, P. Berry and N. Sinclair on F.V. *Courageous*.

Paratype number WAM 177–83 (1; wet) [new registration number: WAM Z 877]

Locality: Station SO2/82/37 (18°20'S, 118°00'E to 18°19'S, 118°01'E), 124 nautical miles [230 km] NNW of Port Hedland, Western Australia, Engel trawl at 320 m depth, bottom temperature 11.9°C, 10 April 1982, L.M. Marsh.

Remarks

The hermit crab with WAM 177–83 was a specimen of *Parapagurus* sp.

Family Sagartiidae Gosse, 1858, s. str.

Genus *Actinothoe* Fischer, 1889

Actinothoe glandulosa Carlgren, 1954

Actinothoe glandulosa Carlgren, 1954: 582–583, figure 13.

Material Examined

Syntypes number WAM 150–56 (1; wet) [new

registration number: WAM Z 878]; WAM 3-64 (3; wet) [new registration number: WAM Z 879].

Locality: Cape Peron [32°16'S, 115°41'E], Western Australia, "in sublittoral on walls of pools and with sponges and ascidians in shady places", 8 January 1952, L.M. Marsh.

Remarks

The locality is given incorrectly as Pt Peron in Carlgren (1954). It is white in colour. One of the specimens in WAM 3-64 is damaged.

Family Stichodactylidae Andres, 1883

Genus *Entacmaea* Ehrenberg, 1834

Gyrostoma sulcatum Lager, 1911

Gyrostoma sulcatum Lager, 1911: 230-232, figures 11-12.

Material Examined

Syntype number WAM 7121 (1; wet) [new registration number: WAM Z 887].

Locality: Station 45, Surf Point [26°07'S, 113°11'E], Shark Bay, Western Australia, at 0.5-3.5 m depth, 16 June 1905, W. Michaelsen and R. Hartmeyer (Hamburg SW Australian Expedition).

Remarks

Locality is given by Lager (1911) as "Stat. 25, Sharks Bay...". However, there are three labels with the specimen. One label clearly states Station 45, another has had Station 25 crossed out and Station 45 written in its place, and the final label has an ambiguous figure which could be read as either 25 or 45. This last label appears to be the original label.

Dunn (1981) reported this species as a synonym of *Entacmaea quadricolor* (Rueppell and Leuckart, 1828).

Order ZOANTHIDEA (?emend. Bourne 1900 pro Zoanthidae) Gray, 1840

Suborder BRACHNEMINA Haddon and Shackleton, 1891

Family Zoanthidae Gray, 1840

Genus *Palythoa* Lamouroux, 1816

Palythoa densa Carlgren, 1954

Palythoa densa Carlgren, 1954: 588-590, figures 20-21.

Material Examined

Syntypes number WAM 157-56 (3 pieces; wet) [new registration number: WAM Z 884].

Locality: South Fish Hook Bay Reef and Cape Vlaming, Rottnest Island [32°00'S, 115°30'E], Western Australia, outer reef flat, collector and date unknown.

Remarks

The location is spelt incorrectly in Carlgren (1954) as "Cape Vleming". They are fawn or pale green in colour when alive and were encrusting many square metres.

Palythoa heideri Carlgren, 1954

Palythoa heideri Carlgren, 1954: 591-592, figure 22.

Material Examined

Syntypes number WAM 158-56 (6 pieces; wet) [new registration number: WAM Z 883].

Location: Cape Vlaming, Rottnest Island [32°00'S, 115°30'E], Western Australia, reef flat, 1950, L.M. Marsh.

Remarks

Grows in clumps up to 2 ft (0.6 m) across on the reef flat and on the side of pools just below tide level; column sand-coloured, oral disc brown (Carlgren, 1954).

Carlgren (1954) had incorrectly put 'n.n.' after the species name. He had described a new species, not given an existing species a new name (ICZN 1985 Appendix E paragraph 21: 233).

Genus *Zoanthus* Lamarck, 1801

Zoanthus marshae Carlgren, 1954

Zoanthus marshae Carlgren, 1954: 587-588, figures 18-19.

Material Examined

Syntypes number WAM 155-56 (1 colony; wet) [new registration number: WAM Z 880]; WAM 165-56 (7 pieces of colonies; wet) [new registration number: WAM Z 881].

Locality: Salmon Point [32°01'S, 115°31'E], Rottnest Island, Western Australia, on sides of pools on reef flat, 1951, L.M. Marsh.

Remarks

WAM 165-56 are part of the type series and are pieces collected from colonies 1-2 ft [0.3-0.6 m] in diameter. All colonies were bluish-grey in colour.

Carlgren (1954) had named this species after Mrs Loisette Marsh but had incorrectly spelt the word as *marshi* (ICZN 1985 Article 31 a).

Zoanthus praelongus Carlgren, 1954

Zoanthus praelongus Carlgren, 1954: 585–587, figures 14–17.

Material Examined

Syntypes number WAM 154–56 (12 pieces from more than 1 colony; wet) [new registration number: WAM Z 882].

Locality: West reefs on Garden Island [32°12'S, 115°40'E], Cape Peron [32°16'S, 115°41'E] and Rottneest Island [32°00'S, 115°30'E], Western Australia, amongst weed on the reef flat, in large clumps of hundreds of individuals, no collection date, L.M. Marsh.

Remarks

The locality in Carlgren (1954) is given incorrectly as "...Pt. Peron....". They are olive green in colour when alive.

Order SCLERACTINIA Bourne, 1900

Suborder ASTROCOENIINA

Family Acroporidae Verrill, 1902

Genus *Acropora* Oken, 1815*Acropora abrolhosensis* Veron, 1985

Acropora abrolhosensis Veron, 1985: 151–153, figures 3–4.

Material Examined

Holotype number WAM 160–84 (dry) [new registration number: WAM Z 899].

Locality: Rat Island [28°42'40"S, 113°47'00"E], Houtman Abrolhos Islands, Western Australia, at 3 m depth on an upper reef slope with consolidated, nearly horizontal substrate, October 1983, J.E.N. Veron.

Remarks

"An arborescent corallum 372 mm high" (Veron, 1985). The specimen is broken into two pieces.

Acropora indiana Wallace, 1994

Acropora indiana Wallace, 1994: 963–965, figures 3–4.

Material Examined

Paratype (in part) number WAM 10–94 (1 piece; dry) [new registration number: WAM Z 902].

Locality: Scott Reef (14°00'S, 121°50'E), Western Australia, at 1 m depth, 31 August 1993, E. Turak.

Remarks

A small piece is broken off the WAM specimen. The other part of the paratype is deposited at the Museum of Tropical Queensland, Townsville.

Acropora loisetteae Wallace, 1994

Acropora loisetteae Wallace, 1994: 965–968, figures 5–6.

Material Examined

Paratype (in part) number WAM 11–94 (1 piece; dry) [new registration number: WAM Z 903].

Locality: Scott Reef (14°00'S, 121°50'E), Western Australia, at 8 m depth, 31 August 1993, E. Turak.

Remarks

Many branches are broken off the WAM specimen. The other part of the paratype is deposited at the Museum of Tropical Queensland, Townsville.

Acropora russelli Wallace, 1994

Acropora russelli Wallace, 1994: 983–984, figures 25–26.

Material Examined

Paratype (in part) number WAM 2–95 (1 piece; dry) [new registration number: WAM Z 905].

Locality: Cartier Reef (12°33'S, 123°34'E), Timor Sea, NW Australia, at 18–25 m depth, 8 May 1992, R. Kelley.

Remarks

WAM specimen is broken into two pieces. The other part of the paratype is deposited at the Museum of Tropical Queensland, Townsville (MTQ G40782).

Acropora turaki Wallace, 1994

Acropora turaki Wallace, 1994: 968–970, figures 7–8.

Material Examined

Paratype (in part) number WAM 9–94 (1 piece; dry) [new registration number: WAM Z 904].

Locality: Clerke Reef (17°22'S, 119°20'E), Rowley Shoals, Western Australia, 8 September 1993, E. Turak.

Remarks

The other part of the paratype is deposited at the Museum of Tropical Queensland, Townsville (MTQ G46447).

Genus *Astreopora* de Blainville, 1830*Astreopora explanata* Veron, 1985

Astreopora explanata Veron, 1985: 153–155, figures 5–6.

Material Examined

Holotype number WAM 161–84 (dry) [new registration number: WAM Z 906].

Locality: Beacon Island, Houtman Abrolhos Islands [28°S, 113°35'E], Western Australia, at 10 m depth on a lower reef slope with a partly consolidated, nearly horizontal substrate, March 1983, J.E.N. Veron.

Remarks

"A piece of a plate 168 mm across" (Veron, 1985).

Genus *Montipora* de Blainville, 1830*Montipora capricornis* Veron, 1985

Montipora capricornis Veron, 1985: 149–150, figure 2.

Material Examined

Holotype number WAM 158–84 (dry) [new registration number: WAM Z 897].

Locality: Llewellyn Reef [23°42'S, 152°11'E], southern Great Barrier Reef, Queensland, at 4 m depth in an enclosed lagoon with turbid water and a soft bottom covered with rubble, 1980, J.E.N. Veron.

Paratype number WAM 159–84 (1; dry) [new registration number: WAM Z 898].

Locality: Fitzroy Reef [23°37'S, 152°10'E], southern Great Barrier Reef, Queensland, at 4 m depth in a lagoon with a substrate of sand and rubble, 1980, J.E.N. Veron.

Remarks

WAM 158–84 is "A plate-like corallum 179 mm maximum diameter" and WAM 159–84 is "A columnar corallum 139 mm high" (Veron, 1985).

Suborder CARYOPHYLLIINA

Superfamily Caryophylloidea Dana, 1846

Family Caryophylliidae Dana, 1846

Genus *Caryophyllia* Lamarck, 1801Subgenus *Acanthocyathus* Milne Edwards and Haime, 1848

Caryophyllia (Acanthocyathus) decamera Cairns 1998

Caryophyllia (Acanthocyathus) decamera Cairns 1998: 377–378, figure 2 d–f.

Material Examined

Paratype number WAM 681–84 (1; dry) [new registration number: WAM Z 609].

Location: Station SO01/84/85, NW of Cape Leveque (14°52.2'S, 121°41.7'E to 14°53.7'S, 121°39.9'E), Western Australia, trawled at 220–224 m depth from a soft bottom, 16 February 1984, S.M. Slack-Smith on F.V. *Soela*.

Paratypes numbers WAM 132–84 (5; dry) [new registration number: WAM Z 610]; WAM 134–84 (1; dry) [new registration number: WAM Z 611].

Location: Station UMD 6920, South Mermaid Reef (17°43.1'S, 119°32.0'E), Rowley Shoals, Western Australia, at 260 m depth from sand and shell substrate, 20 December 1969, K. Ozawa on *Umitaka Maru* Cruise.

Remarks

Both the specimen label and Cairns (1998) mistakenly list the cruise as "Umataka Maru".

Subgenus *Caryophyllia* Lamarck, 1801*Caryophyllia (Caryophyllia) stellula* Cairns, 1998

Caryophyllia (Caryophyllia) stellula Cairns, 1998: 375–376, figure 2 a–c.

Material Examined

Holotype number WAM 301–88 (dry) [new registration number: WAM Z 606].

Paratypes number WAM 301–88 (11; dry) [new registration number: WAM Z 607].

Location: Station 25, W of Rottnest Island (31°48'S, 114°58'E), Western Australia, dredged at 402.3 m depth, 16 March 1976, J.B. Hutchins and J. Scott on H.M.A.S. *Diamantina*.

Paratype number WAM 250–93 (1; dry) [new registration number: WAM Z 608].

Location: Station 20, W of Rottnest Island (31°44'S, 114°56'E), Western Australia, dredged at 220 to 245 fathoms [402.3 to 448.0 m] depth, 16 March 1976, J.B. Hutchins and J. Scott on H.M.A.S. *Diamantina*.

Remarks

Four paratypes from WAM 301–88 were donated to the USNM (USNM 97817).

Genus *Oxysmilia* Duchassaing, 1870*Oxysmilia circularis* Cairns 1998

Oxysmilia circularis Cairns 1998: 378–379, figure 2 i–k.

Material Examined

Holotype number WAM 102-83 (dry) [new registration number: WAM Z 612].

Location: Station SO2/82/16, 106 nautical miles NW of Port Hedland (18°41'S, 117°54'E to 18°41.7'S, 117°52.6'E), Western Australia, trawled at 200-204 m depth from limestone rocks and mud with a bottom temperature of 16.2°C, 2 April 1982, L.M. Marsh on F.V. *Soela*.

Paratypes number WAM 85-84 (4; dry) [new registration number: WAM Z 614].

Location: Station SO2/82/13A, 114 nautical miles N of Port Hedland (18°25'S, 118°22'E), Western Australia, dredged at 201 m depth from limestone rubble and grey mud, 2 April 1982, L.M. Marsh on F.V. *Soela*.

Paratypes number WAM 105-83 (9; dry) [new registration number: WAM Z 613].

Location: Station SO2/82/17, 26 nautical miles SW of Imperieuse Reef (17°48.7'S, 118°30'E to 17°50'S, 118°28.5'E), Rowley Shoals, Western Australia, trawled at 404 m depth from mud and rubble with a bottom temperature of 9.6°C, 3 April 1982, L.M. Marsh on F.V. *Soela*.

Remarks

Three paratypes from WAM 85-84 were donated to USNM (USNM 96990).

WAM 105-83 is one cluster of nine coralla.

Genus *Rhizosmilia* Cairns, 1978***"Rhizosmilia" multipalifera* Cairns, 1998**

"Rhizosmilia" multipalifera Cairns, 1998: 386-388, figure 4 b, c, e, f.

Material Examined

Holotype number WAM 129-83 (dry) [new registration number: WAM Z 615].

Paratypes number WAM 129-83 (2; dry) [new registration number: WAM Z 616].

Location: Station 41M, 35 km W of Jurien Bay (30°16.8'S, 114°39.6'E to 30°17.9'S, 114°39.9'E), Western Australia, dredged at 82.3 m depth, 19 February 1976, WAM Palaeontology Department on M.V. *Sprightly*.

Paratype number WAM 127-83 (1; dry) [new registration number: WAM Z 618].

Location: Station 19M, 82 km W of Dongara (29°14'S, 114°04'E to 29°14.8'S, 114°5.1'E), Western Australia, dredged at 164.6 m depth from small stones, sponges and sand, 17 February 1976, WAM Palaeontology Department on M.V. *Sprightly*.

Paratype number WAM 132-83 (1; dry) [new registration number: WAM Z 619].

Location: Station 20M, 77 km SW of Dongara (29°21'S, 114°07'E to 29°21.5'S, 114°07.5'E), Western Australia, dredged at 146 m depth, 18 February 1976, WAM Palaeontology Department on M.V. *Sprightly*.

Paratype number WAM 360-79 (1; dry) [new registration number: WAM Z 617].

Location: Station 33M, 92 km W of Dongara (29°06.7'S, 113°58.5'E to 29°07.5'S, 114°00'E), Western Australia, dredged at 91.4 m depth, 19 February 1976, WAM Palaeontology Department on M.V. *Sprightly*.

Paratype number WAM 135-83 (1; dry) [new registration number: WAM Z 620].

Location: Station 34M, 97 km W of Dongara (29°07.2'S, 113°56.4'E to 29°08'S, 113°56.7'E), Western Australia, dredged at 140.8 m depth, 19 February 1976, WAM Palaeontology Department on M.V. *Sprightly*.

Paratype number WAM 242-93 (1; dry) [new registration number: WAM Z 621].

Location: Station DM55, W of Dongara (29°15'S, 114°01'E), Western Australia, at 146 m depth, 20 March 1972, B.R. Wilson *et al.* on H.M.A.S. *Diamantina*.

Paratype number WAM 145-83 (1; dry) [new registration number: WAM Z 623].

Location: Station DM76, W of Guilderton (31°30'S, 114°56'E to 31°34'S, 115°06'E), Western Australia, at 146 m depth, 23 March 1972, B.R. Wilson *et al.* on H.M.A.S. *Diamantina*.

Paratype number WAM 226-93 (1; dry) [new registration number: WAM Z 622].

Location: CSIRO station 208, cruise number DM 6/63, W of Bluff Point (27°40'S, 113°20'E), Western Australia, trawled at 71.5 fathoms [131 m] depth from amongst sponge and bryozoa, 10 October 1963, Chittleborough and Thomas.

Remarks

The registration number for WAM 145-83 is given incorrectly as '148-83' in Cairns (1998).

Family Turbinoliidae Milne Edwards and Haime, 1848**Genus *Conocyathus* d'Orbigny, 1849*****Conocyathus gracilis* Cairns 1998**

Conocyathus gracilis Cairns 1998: 388-390, figures 5 i, 6 a-d.

Material Examined

Holotype number WAM 31-85 (dry) [new registration number: WAM Z 624].

Location: NNW of Dampier (19°34'S, 116°08'E), Western Australia, dredged at 55 fathoms [110.6 m] depth, 19 August 1979, S.M. Slack-Smith on F.V. *Soela*.

Superfamily Flabelloidea Bourne, 1905

Family Flabellidae Bourne, 1905

Genus *Flabellum* Lesson, 1831

Subgenus *Flabellum* Lesson, 1831

Flabellum (*Flabellum*) *folkesoni* Cairns 1998

Flabellum (*Flabellum*) *folkesoni* Cairns 1998: 393–394, figure 6 c–i.

Material Examined

Holotype number WAM 173–83 (dry) [new registration number: WAM Z 625].

Paratypes numbers WAM 170–83 (1; dry) [new registration number: WAM Z 627]; WAM 260–93 (2; dry) [new registration number: WAM Z 628].

Location: Between Shark Bay [25°50'S, 114°10'E] and Onslow [21°38'S, 115°07'E], Western Australia, trawled, 1966, W. and W. Poole.

Paratype number WAM 212–92 (1; dry) [new registration number: WAM Z 631].

Location: Station SO001/0018 (19°32'S, 116°00'E to 19°31'S, 116°01'E), NNE of Montebello Islands, Western Australia, trawled at 144 m depth, 3 December 1979, S.M. Slack-Smith and L.M. Marsh on F.V. *Soela*.

Paratypes number WAM 98–83 (5; dry) [new registration number: WAM Z 629].

Location: Station SO2/82/09 (18°33'S, 118°22'E to 18°33'S, 118°20'E), 106 nautical miles NNW of Port Hedland, Western Australia, trawled at 150 m depth from sand or mud with a bottom temperature of 19.0°C, 28 March 1982, L.M. Marsh on F.V. *Soela*.

Paratype number WAM 609–88 (1; dry) [new registration number: WAM Z 630].

Location: Station SO4B/82/74 (18°43'S, 118°17'E to 18°44.2'S, 118°18.6'E), 120 nautical miles NNE of Port Hedland, Western Australia, trawled at 144 m depth from shell agglomerates, 19 August 1982, J. Marshall on F.V. *Soela*.

Paratype number WAM 62–83 (1; dry) [new registration number: WAM Z 626].

Location: Station SO5/82/47 (18°39.3'S, 118°57.0'E to 18°37.6'S, 118°54.2'E), 102 nautical miles NNE of Port Hedland, Western Australia, trawled at 128–130 m depth, 3 October 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratype number WAM 12–96 (1; dry) [new registration number: WAM Z 632].

Location: Station LB4 (19°08.36'S, 117°43.95'E to 19°06.7'S, 117°45.3'E), NNE of Cape Lambert, Western Australia, sled at 112–124 m depth on sand, 17 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratypes number WAM 27–96 (27; dry) [new registration number: WAM Z 634].

Location: Station LB5 (18°42.8'S, 118°03.2'E to 18°39.6'S, 118°06.3'E), NE of Cape Lambert, Western Australia, sled at 150–160 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratype number WAM 23–96 (21; dry) [new registration number: WAM Z 633].

Location: Station LB5 (18°36.6'S, 118°07'E to 18°36.3'S, 118°08.5'E), 129 nautical miles NE of Cape Lambert, Western Australia, try net at 150–160 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratypes number WAM 40–96 (6; dry) [new registration number: WAM Z 636].

Location: Station LB6 (18°06.9'S, 118°56.7'E to 18°04.4'S, 118°58.1'E), S of Cunningham Island, Imperieuse Reef, Western Australia, sled at 173–193 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratype number WAM 38–96 (1; dry) [new registration number: WAM Z 635].

Location: Station LB6 (18°09.5'S, 118°54.5'E to 18°07.1'S, 118°56.5'E), 38 nautical miles S of Cunningham Island, Imperieuse Reef, Western Australia, try net at 173–193 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Remarks

The total number of paratypes for both WAM 170–83 and WAM 260–93 is given incorrectly as 23 specimens in Cairns (1998).

Three paratypes from WAM 98–83 were donated to USNM (USNM 97019), one specimen from WAM 27–96 was donated to USNM (USNM 96586) and three specimens from WAM 23–96 were donated to USNM (USNM 97020).

Genus *Truncatoflabellum* Cairns, 1989

Truncatoflabellum australiensis Cairns, 1998

Truncatoflabellum australiensis Cairns, 1998: 396–399, figures 7 d–f, 8 b.

Material Examined

Holotype number WAM 169–83 (dry) [new registration number: WAM Z 637].

Paratypes numbers WAM 171–83 (1; dry) [new registration number: WAM Z 657]; WAM 172–83 (2; dry) [new registration number: WAM Z 658]; WAM 442–96 (ex WAM 260–93) (2; dry) [new registration number: WAM Z 664].

Location: Between Shark Bay [25°50'S, 114°10'E] and Onslow [21°38'S, 115°07'E], Western Australia, trawled, 1966, W. and W. Poole.

Paratypes number WAM 59–83 (2; dry) [new registration number: WAM Z 638].

Location: Station SO5/82/37 (19°19.2'S, 116°46.3'E to 19°18.1'S, 116°44.8'E), 65 nautical miles N of Legendre Island, Western Australia, trawled at 132–144 m depth from sandy silt, 1 October 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratype number WAM 61–83 (1; dry) [new registration number: WAM Z 639].

Location: Station SO5/82/42 (18°58.0'S, 117°36.2'E to 18°56.4'S, 117°34.6'E), 98 nautical miles NW of Port Hedland, Western Australia, trawled at 140–164 m depth from silt, 2 October 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratypes numbers WAM 63–83 (1; dry) [new registration number: WAM Z 640]; WAM 66–83 (1; dry) [new registration number: WAM Z 641].

Location: Station SO5/82/47 (18°39.3'S, 118°57.0'E to 18°37.6'S, 116°54.2'E), 102 nautical miles NNE of Port Hedland, Western Australia, trawled at 128–130 m depth, 3 October 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratypes number WAM 102–84 (2; dry) [new registration number: WAM Z 659].

Location: Station UMD 6927 (17°33.5'S, 121°33.0'E), W of Broome, Western Australia, at 92 m depth, 21 December 1969, K. Ozawa on *Umitaka Maru* Cruise.

Paratype number WAM 134–83 (1; dry) [new registration number: WAM Z 642].

Location: Station 34M (29°07.2'S, 113°56.4'E to 29°08'S, 113°56.7'E), 97 km W of Dongara, Western Australia, dredged at 140.8 m depth, 19 February 1976, WAM Palaeontology Department on M.V. *Sprightly*.

Paratypes numbers WAM 224–93 (1; dry) [new registration number: WAM Z 660]; WAM 225–93 (1; dry) [new registration number: WAM Z 661].

Location: CSIRO station 208, cruise number DM 6/63, W of Bluff Point (27°40'S, 113°20'E), Western Australia, trawled at 71.5 fathoms [130 m] depth from sponge and bryozoa, 10 October 1963, Chittleborough and Thomas.

Paratypes number WAM 24–96 (20; dry) [new registration number: WAM Z 665].

Location: Station LB5 (18°42.8'S, 118°03.2'E to 18°39.6'S, 118°06.3'E), NE of Cape Lambert,

Western Australia, sled at 150–160 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratype number WAM 144–83 (1; dry) [new registration number: WAM Z 656].

Location: 20 miles [32.2 km] NW of Anchor Island, Onslow [21°38'S, 115°07'E], Western Australia, at 65 fathoms [118.9 m] depth from mud, 17 June 1960, Western Australia Hawaiian Expedition.

Paratype number WAM 231–93 (1; dry) [new registration number: WAM Z 662].

Location: 10 miles [16 km] NNW of Anchor Island, Onslow [21°38'S, 115°07'E], Western Australia, at 65 fathoms [118.9 m] depth, 17 June 1960, Western Australia Hawaiian Expedition.

Paratypes number WAM 259–93 (6; dry) [new registration number: WAM Z 663].

Location: 14 miles [22.4 km] NNW of Anchor Island, Onslow [21°38'S, 115°07'E], Western Australia, at 65 fathoms [118.9 m] depth from gravel and mud, 17 June 1960, Western Australia Hawaiian Expedition.

Remarks

On the specimen label and in Cairns (1998) the cruise name is spelt incorrectly as *Umatka Maru* for WAM 102–84.

Three paratypes from WAM 259–93 were donated to USNM (USNM 96652).

Cairns (1998) cites incorrectly the number of paratypes for WAM 24–96 as 19. He also states incorrectly that there were nine paratypes for WAM 144–83, 231– and 259–93 when in fact there were eight.

Truncatoflabellum macroeschara Cairns, 1998

Truncatoflabellum macroeschara Cairns, 1998: 401, figure 8 d, e, g–i.

Material Examined

Holotype number WAM 50–83 (dry) [new registration number: WAM Z 680].

Paratype number WAM 50–83 (1; dry) [new registration number: WAM Z 681].

Location: Station SO5/82/13 (19°52.3'S, 117°16.1'E to 19°52.9'S, 117°14.4'E), 43 nautical miles N of Cape Lambert, Western Australia, trawled at 56–58 m depth from sand, 27 September 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratype number WAM 97–83 (1; dry) [new registration number: WAM Z 682].

Location: Station SO2/82/09 (18°33'S, 118°22'E to 18°33'S, 118°20'E), 106 nautical miles NNW of Port Hedland, Western Australia, trawled at 150 m

depth from sand or mud with a bottom temperature of 19°C, 28 March 1982, L.M. Marsh on F.V. *Soela*.

Paratypes numbers WAM 77–84 (2; dry) [new registration number: WAM Z 683]; WAM 98–84 (2; dry) [new registration number: WAM Z 684].

Locality: Station SO2/82/13A (18°25'S, 118°22'E), 114 nautical miles N of Port Hedland, Western Australia, dredged at 201 m depth from limestone rubble and grey mud, 2 April 1982, L.M. Marsh on F.V. *Soela*.

Paratype number WAM 82–83 (1; dry) [new registration number: WAM Z 685].

Locality: Station SO4B/82/64 (19°25'S, 117°11'E to 19°26.6'S, 117°12.4'E), 23 nautical miles ENE of Glomar Shoal, Western Australia, trawled at 90–98 m depth from fine silty sand, 17 August 1982, J. Marshall on F.V. *Soela*.

Paratype number WAM 75–83 (1; dry) [new registration number: WAM Z 686].

Locality: Station SO5/82/60 (19°28.1'S, 118°27.1'E to 19°27.5'S, 118°26.3'E), 51 nautical miles N of Port Hedland, Western Australia, trawled at 62–66 m depth from shelly sand, 5 October 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratype number WAM 79–83 (1; dry) [new registration number: WAM Z 687].

Locality: Station SO5/82/65 (19°34.0'S, 117°18.3'E to 19°02.5'S, 117°18.8'E), 62 nautical miles NNE of Cape Lambert, Western Australia, at 78–84 m depth from sandy silt and rubble, 6 October 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratype number WAM 230–93 (2; dry) [new registration number: WAM Z 688].

Locality: 10 miles [16 km] NNW of Anchor Island, Onslow [21°38'S, 115°07'E], Western Australia, at 65 fathoms [118.9 m] depth from mud and gravel, 17 June 1960, Western Australia Hawaiian Expedition.

Paratype number WAM 13–96 (1; dry) [new registration number: WAM Z 690].

Locality: Station LB4 (19°08.36'S, 117°43.95'E to 19°06.7'S, 117°45.3'E), NNE of Cape Lambert, Western Australia, sled at 112–124 m depth on sand, 17 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratype number WAM 34–96 (1; dry) [new registration number: WAM Z 693].

Locality: Station LB5 (18°42.8'S, 118°03.2'E to 18°39.6'S, 118°06.3'E), NE of Cape Lambert, Western Australia, sled at 150–160 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratypes number WAM 17–96 (3; dry) [new registration number: WAM Z 691].

Locality: Station LB5 (18°36.6'S, 118°07'E to 18°36.3'S, 118°08.5'E), 129 nautical miles NE of Cape Lambert, Western Australia, try net at 150–160 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Paratypes numbers WAM 37–96 (1; dry) [new registration number: WAM Z 694]; WAM 39–96 (2; dry) [new registration number: WAM Z 689].

Locality: Station LB6, 38 nautical miles S of Cunningham Island (18°09.5'S, 118°54.5'E to 18°07.1'S, 118°56.5'E), Imperieuse Reef, Western Australia, try net at 173–193 m depth on limestone rubble and dead shells substrate, 18 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Remarks

Cairns (1998) states incorrectly that there were two paratypes for WAM 77– and 98–84, when in fact there are two paratypes each; making the total number for both of these WAM numbers to be four.

One specimen from WAM 230–93 was donated to USNM (USNM 96661) and one specimen from WAM 39–96 was donated to USNM (USNM 96664).

Truncatoflabellum veroni Cairns, 1998

Truncatoflabellum veroni Cairns, 1998: 400, figures 7 g–i, 8 c.

Material Examined

Holotype number WAM 89–83 (dry) [new registration number: WAM Z 669].

Paratypes numbers WAM 89–83 (13; dry) [new registration number: WAM Z 670]; WAM 91–83 (3; dry) [new registration number: WAM Z 671].

Location: Station SO2/82/54A (19°59'S, 117°16'E to 20°01'S, 117°16'E), 38 nautical miles N of Port Walcott, Western Australia, dredged at 50–52 m depth from silty sand and bryozoa with a bottom temperature of 28.8°C, 15 April 1982, L.M. Marsh on F.V. *Soela*.

Paratype number WAM 624–88 (1; dry) [new registration number: WAM Z 672].

Location: Station SO4B/82/51A (20°10'S, 116°34'E), 19 nautical miles N of Rosemary Island, Dampier Archipelago, Western Australia, trawled at 49 m depth from sand, 15 August 1982, J. Marshall on F.V. *Soela*.

Paratypes number WAM 49–83 (2; dry) [new registration number: WAM Z 673].

Location: Station SO5/82/12 (20°01.0'S, 117°13.1'E to 20°02.4'S, 117°14.3'E), 35 nautical miles N of Cape Lambert, Western Australia, trawled at

46–49 m depth from sand, 27 September 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratypes numbers WAM 47–83 (1; dry) [new registration number: WAM Z 674]; WAM 48–83 (1; dry) [new registration number: WAM Z 675].

Location: SO5/82/-, between Dampier [20°40'S, 116°42'E] and Port Hedland [20°19'S, 118°36'E] on the NW Shelf, Western Australia, 27 September 1982, L.M. Marsh and M. Bezant on F.V. *Soela*.

Paratype number WAM 443–96 (1; dry) [new registration number: WAM Z 676].

Location: 6.4 km W of Cape Jaubert [18°57'S, 121°33'E], Western Australia, at 22 fathoms [40.2 m] depth, 13 October 1962, R.W. George on F.V. *Dorothea*.

Paratype number WAM 444–96 (1; dry) [new registration number: WAM Z 973].

Location: 130 miles [209 km] ENE of Troughton Island [13°45'S, 126°08'E], Western Australia, from 50 fathoms [91.4 m] from mud, 23 October 1962, R.W. George on F.V. *Dorothea*.

Paratype number WAM 445–96 (1; dry) [new registration number: WAM Z 677].

Location: 14 miles [22.4 km] NNW of Anchor Island, Onslow [21°38'S, 115°07'E], Western Australia, at 118.9 m depth, 17 June 1960, Western Australia Hawaiian Expedition.

Paratypes number WAM 6–96 (2; dry) [new registration number: WAM Z 679].

Location: Station LB1b (20°09.98'S, 116°58.45'E to 20°09.07'S, 116°59.28'E), NNE of Legendre Island, Dampier Archipelago, Western Australia, sled at 45 m depth on sand, 17 August 1995, L.M. Marsh *et al.* on R.V. *Lady Basten*.

Remarks

Four paratypes from WAM 89–83 were donated to USNM (USNM 96655), one paratype from WAM 49–83 was donated to USNM (USNM 96658) and WAM 444–96 was donated to USNM (USNM 96660).

The specimen with registration number WAM 48–83 is broken in half.

Suborder FAVIINA

Family Merulinidae Verrill, 1866

Genus *Hydnophora* Fischer de Waldheim, 1807

Hydnophora pilosa Veron, 1985

Hydnophora pilosa Veron, 1985: 176–179, figures 26–28.

Material Examined

Holotype number WAM 174–84 (dry) [new registration number: WAM Z 919].

Locality: Elizabeth Reef [29°58'S, 159°13'E], eastern Australia, at 6 m depth on a flat consolidated substrate exposed to moderate wave action, 1982, J.E.N. Veron.

Paratype number WAM 175–84 (1; dry) [new registration number: WAM Z 920].

Locality: Beacon Island, Houtman Abrolhos Islands [28°S, 113°35'E], Western Australia, at 28 m depth on a lower reef slope with a substrate of unconsolidated rubble, March 1983, J.E.N. Veron.

Paratype number WAM 176–84 (1; dry) [new registration number: WAM Z 921].

Locality: Legendre Island [20°23'S, 116°52'E], Dampier Archipelago, Western Australia, at 12 m depth on horizontal solid substrate in clear water, 1983, J.E.N. Veron.

Remarks

WAM 174–84 is "A complete colony with an encrusting base and a cluster of short branches. Maximum dimension 198 mm", WAM 175–84 is "A flat laminary plate 139 mm maximum dimension" and WAM 176–84 is "An arborescent corallum 129 mm high." (Veron, 1985).

The collection date is cited incorrectly as 1982 for WAM 175–84, in Veron (1985).

Family Mussidae Ortmann, 1890

Genus *Australomussa* Veron, 1985

Australomussa rowleyensis Veron, 1985

Australomussa rowleyensis Veron, 1985: 171–175, figures 23–25.

Material Examined

Holotype number WAM 171–84 (dry) [new registration number: WAM Z 907].

Locality: Legendre Island [20°23'S, 116°52'E], Dampier Archipelago, Western Australia, at 17 m depth at the base of a fringing reef with a nearly vertical slope, 1983, J.E.N. Veron.

Paratype number WAM 172–84 (1; dry) [new registration number: WAM Z 908].

Locality: Mermaid Reef [15°30'S, 119°00'E], Rowley Shoals, Western Australia, at 9 m depth in a protected, clear, reef lagoon with an undulating sand and rubble substrate, July 1982, J.E.N. Veron.

Paratype number WAM 173–84 (1; dry) [new registration number: WAM Z 909].

Locality: Phuket Peninsula, western Thailand, at 18 m depth on a substrate of steeply sloping rock and soft sediment in turbid water, 1984, J.E.N. Veron.

Remarks

WAM 171–84 is "A distorted, oval-shaped,

flattened whole corallum with a maximum dimension of 256 mm" and WAM 172-84 is "Part of a flat corallum. Maximum dimension 240 mm" (Veron, 1985).

The registration number for WAM 173-84 is written incorrectly as WAM 183-84 in Veron (1985).

Genus *Lobophyllia* de Blainville, 1830

Lobophyllia diminuta Veron, 1985

Lobophyllia diminuta Veron, 1985: 165-167, figures 16-17.

Material Examined

Holotype number WAM 167-84 (dry) [new registration number: WAM Z 913].

Locality: Northern Swain Reefs [22°00'S, 152°35'E], Queensland, at 2 m depth in a protected lagoonal area on a reef back margin, 1983, J.E.N. Veron.

Remarks

"A piece of branching corallum 154 mm maximum width" (Veron, 1985). The specimen is broken into three pieces.

Genus *Symphyllia* Milne-Edwards and Haime, 1848

Symphyllia wilsoni Veron, 1985

Symphyllia wilsoni Veron, 1985: 167-171, figures 18-22.

Material Examined

Holotype number WAM 168-84 (dry) [new registration number: WAM Z 910].

Locality: Rat Island [28°42'40"S, 113°47'00"E], Houtman Abrolhos Islands, Western Australia, at 8 m depth on a horizontal consolidated rock substrate exposed to moderate wave action, October 1983, J.E.N. Veron.

Paratype number WAM 169-84 (1; dry) [new registration number: WAM Z 911].

Locality: Port Denison [29°16'S, 114°55'E], Western Australia, at 9 m depth in a rocky crevice protected from strong wave action, 1982, J.E.N. Veron.

Paratype number WAM 170-84 (1; dry) [new registration number: WAM Z 912].

Locality: Port Denison [29°16'S, 114°55'E], Western Australia, at 12 m depth under a rock overhang protected from wave action, 1982, J.E.N. Veron.

Remarks

WAM 168-84 is a "... sub-circular flattened whole corallum with a maximum dimension of 114 mm.", WAM 169-84 is "Part of a massive colony. Maximum dimension 139 mm." and WAM 170-84 is "Part of a massive colony. Maximum dimensions 142 mm." (Veron, 1985).

Suborder FUNGIINA

Family Agariciidae Gray, 1847

Genus *Leptoseris* Milne-Edwards and Haime, 1849

Leptoseris glabra Dineson, 1980

Leptoseris glabra Dineson, 1980: 200-201, plates 15-16.

Material Examined

Paratype number WAM 390-77 (1; dry) [new registration number: WAM Z 900].

Locality: Goss Passage, Beacon Island, Houtman Abrolhos Islands [28°S, 113°35'E], Western Australia, at 31 m depth, 30 August 1977, B. R. Wilson.

Paratype number WAM 116-77 (1; dry) [new registration number: WAM Z 901].

Locality: West side of Malaupina Island, East Solomon Islands, Pacific Ocean (10°15'S, 161°58.5'E), on outer reef slope, 27 October 1975, B.R. Wilson and W. Starck.

Remarks

WAM 116-77 is broken into two pieces.

Family Fungiacyathidae Chevalier, 1987

Genus *Fungiacyathus* Sars, 1872

Subgenus *Fungiacyathus* Sars, 1872

Fungiacyathus (Fungiacyathus) multicarinatus Cairns, 1998

Fungiacyathus (Fungiacyathus) multicarinatus Cairns, 1998: 370, figure 1 a-c.

Material Examined

Holotype number WAM 547-84 (dry) [new registration number: WAM Z 605].

Location: Station SO01/84/054, WNW Lacepede Archipelago (15°51.2'S, 120°44.3'E to 15°49.3'S, 120°45.3'E), Western Australia, trawled at 348-350 m from a soft bottom, 10 February 1984, S.M. Slack-Smith on F.V. Soela.

Family Poritidae Gray, 1842

Genus *Alveopora* de Blainville, 1830*Alveopora gigas* Veron, 1985

Alveopora gigas Veron, 1985: 163–165, figures 14–15.

Material Examined

Holotype number WAM 166–84 (dry) [new registration number: WAM Z 918].

Locality: Near Rat Island [28°42'40"S, 113°47'00"E], Easter Group, Houtman Abrolhos Islands, Western Australia, at 12 m depth on a very protected reef slope with unconsolidated substrate, October 1983, J.E.N. Veron.

Remarks

"A column end 150 mm long and 84 mm thick" (Veron, 1985). Veron (1985) states the date of collection as '1982'.

Genus *Goniopora* de Blainville, 1830*Goniopora pendulus* Veron, 1985

Goniopora pendulus Veron, 1985: 160–163, figures 12–13.

Material Examined

Holotype number WAM 164–84 (dry) [new registration number: WAM Z 916].

Locality: Near Rat Island [28°42'40"S, 113°47'00"E], Easter Group, Houtman Abrolhos Islands, Western Australia, at 8 m depth on a sloping reef with unconsolidated substrate, protected from strong wave action, October 1983, J.E.N. Veron.

Paratype number WAM 165–84 (1; dry) [new registration number: WAM Z 917].

Locality: 'The Maze' [28°42'30"S, 113°47'50"E] near Rat Island, Easter Group, Houtman Abrolhos Islands, Western Australia, at 17 m depth on a sloping reef with unconsolidated substrates and very protected, partly turbid water, October 1983, J.E.N. Veron.

Remarks

WAM 164–84 is a "...148 mm long piece of a massive corallum" and WAM 165–84 is a "...132 mm long piece of a massive corallum" (Veron, 1985).

Genus *Porites* Link, 1807*Porites (Porites) heronensis* Veron, 1985

Porites (Porites) heronensis Veron, 1985: 155–158, figures 7–9.

Material Examined

Holotype number WAM 162–84 (dry) [new registration number: WAM Z 914].

Locality: Heron Island [23°27'S, 151°55'E], Queensland, at 2 m depth on an upper reef slope exposed to moderate wave action, 1982, J.E.N. Veron.

Remarks

"An encrusting incomplete corallum 126 mm diameter" (Veron, 1985).

Porites (Porites) myrmidonensis Veron, 1985

Porites (Porites) myrmidonensis Veron, 1985: 158–160, figures 10–11.

Material Examined

Holotype number WAM 163–84 (dry) [new registration number: WAM Z 915].

Locality: Magdelaine Cay, Coral Sea [9°08'S, 143°46'E to 24°15'S, 152°45'E] Australia, at 12 m depth on a reef slope exposed to moderate wave action, 1978, J.E.N. Veron.

Remarks

"An encrusting corallum 126 mm diameter" (Veron, 1985).

Family Siderastreidae Vaughan and Wells, 1943

Genus *Coscinaraea* Edwards and Haime, 1848*Coscinaraea marshae* Wells, 1962

Coscinaraea marshae Wells, 1962: 240–241, plate 17 figures 1–4, plate 18 figures 1–3.

Material Examined

Holotype number WAM 104–58 (dry) [new registration number: WAM Z 889], plate 17 figures 1–3.

Locality: Point Clune, Rottnest Island [32°00'S, 115°30'E], Western Australia, at 10 feet [3 m] depth, no collection date, E.P. Hodgkin.

Paratype number WAM Z 890 (1; dry) plate 18 figure 2.

Locality: Cathedral Rocks, Rottnest Island [32°00'S, 115°30'E], Western Australia, March 1956, E.P. Hodgkin.

Paratypes numbers WAM 103–58 (1; dry) [new registration number: WAM Z 891], plate 18 figure 1; WAM 102–58 (1; dry) [new registration number: WAM Z 892].

Locality: Cathedral Rocks, Rottnest Island [32°00'S, 115°30'E], Western Australia, March 1956, E.P. Hodgkin.

Paratype number WAM 101-58 (1; dry) [new registration number: WAM Z 893] plate 17, figure 4.

Locality: Point Clune, Rottnest Island [32°00'S, 115°30'E], Western Australia, at 10 feet [3 m] depth, no collection date, E.P. Hodgkin.

Paratype number WAM 100-58 (1; dry) [new registration number: WAM Z 894].

Locality: Woodman Point [32°08'S, 115°44'E], near Fremantle, Western Australia, 1957, E. Carr.

Paratype number WAM 52-59 (1; dry) [new registration number: WAM Z 895].

Locality: Eagle Bay [33°33'S, 115°04'E], Cape Naturaliste, Western Australia, at 30 feet [9 m] in a rock crevice, 26 December 1958, B.R. Wilson and L.M. Marsh.

Paratype number WAM 59-59 (1; dry) [new registration number: WAM Z 896], plate 18 figure 3.

Locality: 1.5 miles (2 km) north of Dunsborough [33°36'S, 115°06'E], Geographe Bay, Western Australia, at 25 feet [7.5 m] depth from a crevice in a rocky ledge, 1958, B.R. Wilson and L.M. Marsh.

Remarks

Wells (1962) misquotes WAM 52-59 as 'WAM 52-29'.

Colonies numbers WAM 101-58 and WAM 104-58 were brown in colour when alive. The colony of WAM 52-59 was yellow-brown in colour when alive.

The specimen of WAM 100-58 is broken into two pieces. Specimen WAM 59-59 is part of a colony only. Specimen WAM Z 890 was the unregistered paratype described in Wells (1962).

In Wells (1962), under the subheading 'Occurrence' (page 241), WAM 103-58 is written incorrectly as 'WAM 103-28'.

Specimen numbers WAM 100-58, WAM 102-58 and WAM 52-59 have been re-identified as *Coscinaraca mcneilli* Wells, 1962 by Veron and Marsh (1988).

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